



Sim & McBurney
Patent and Trade-mark Agents

5610

JG20 Rec'd PCT/PTO 2 0 AUG 2001

330 University Avenue
6th floor
Toronto, Canada
M5G 1R7
Telephone 416-595-1155
Fax 416-595-1163

09/673,133
MICHAEL I. STEWART
ROGER T. HUGHES, O.C.
TONI POLSON ASHTON
JOHN H. WOODLEY
KENNETH D. MCKAY
TIMOTHY M. LOWMAN
STEPHEN M. LANE
ARTHUR B. RENAUD
STEPHEN J. PERRY
PATRICIA A. RAE
DAVID A. RUSTON
L.E. TRENT HORNE
LOLA A. BARTOSZEWICZ
THOMAS T. RIEDER
WARREN J. GALLOWAY
STEVEN L. NEMETZ
URSULA M. MCGUINNESS
ROBERT C.T. LIANG

SENIOR CONSULTANTS
PETER W. MCBURNEY
BRENDA L. BOARDMAN

TECHNICAL ASSISTANTS
KIMBERLY A. MCMANUS, PH.D.
PETER S. HARRISON, PH.D.
LESLEY M. MORRISON, B.Sc.MECH.
GEOFFREY B.C. DEKLEINE, M.Sc.(ENG.)
WENDY M. NOSS, B.A., L.L.B.

Please Quote
Our ref. 1038-1102 MIS:ac

Your ref.

Writer's Ext. 239

August 17, 2001

BY COURIER

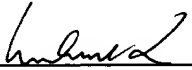
The Commissioner of Patents
and Trademarks,
Washington, D.C.
U.S.A. 20231

Dear Sirs:

Re: U.S. Patent Application No. 09/673,133
Lisa E. Myers et al
TRANSFERRIN RECEPTOR GENES OF MORAXELLA
Filed: April 12, 1999
Group No.:---

Further to the Information Disclosure Statement submitted in April
4, 2001, submitted herewith are copies of the references asterisked in the
Information Disclosure Statement listing and indicated to follow.

Yours very truly,

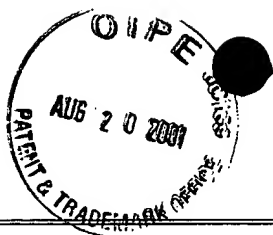

Michael I. Stewart
Registration No. 24,973

MIS:ac
Enclosures

RECEIVED

05 SEP 2001

**Legal staff
International Division**

Sheet 1 of 3

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT	ATTY. DOCKET NO. 1038-1102 MIS/bh	SERIAL NO. 09/673,133
	APPLICANT Lisa E. Myers et al	
	FILING DATE April 12, 1999	GROUP

U.S. PATENT DOCUMENTS

*INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUBCL.	FILING DATE
		5,292,869	1994	Schryvers	530	413	
		5,708,149	1998	Schryvers, Anthony et al			
		5,194,254		Barber et al			
		4,855,283	Aug.8,89	Lockhoff et al			
		4,258,029		Moloney et al			

FOREIGN PATENT DOCUMENTS

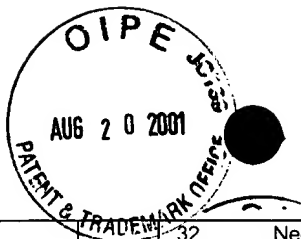
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCL.	TRANSLATION	
							YES	NO
		WO 97/13785	April 17/97	PCT				
		WO 90/12591	November 1/90	PCT				
		WO 95/33049	December 7/95	PCT				
		WO 93/08283	April 29/93	PCT				
		WO 97/32980	Sept.12/97	PCT				
		WO 97/32380		PCT				
		WO 95/34308		PCT				
		WO 94/12641		PCT				
		WO 92/17167		PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

1. Brorson, J-E., A. Axelsson, and S.E. Holm. 1976. Studies on *Branhamella catarrhalis* (*Neisseria catarrhalis*) with special reference to maxillary sinusitis. Scan. J. Infect. Dis. 8:151-155.



	2.	Catlin, B.W., 1990. <i>Branhamella catarrhalis</i> : an organism gaining respect as a pathogen. Clin. Microbiol. Rev. 3: 293-320.
	3.	Hager, H., A. Verghese, S. Alvarez, and S.L. Berk. 1987. <i>Branhamella catarrhalis</i> respiratory infections. Rev. Infect. Dis. 9:1140-1149.
	4.	McLeod, D.T., F. Ahmad, M.J. Croughan, and M.A. Calder. 1986. Bronchopulmonary infection due to <i>M. catarrhalis</i> . Clinical features and therapeutic response. Drugs 31(Suppl.3):109-112.
	5.	Nicotra, B., M. Rivera, J.I. Luman, and R.J. Wallace. 1986. <i>Branhamella catarrhalis</i> as a lower respiratory tract pathogen in patients with chronic lung disease. Arch.Intern.Med. 146:890-893.
	6.	Ninane, G., J. Joly, and M. Kraytman. 1978. Bronchopulmonary infection due to <i>Branhamella catarrhalis</i> 11 cases assessed by transtracheal puncture. Br.Med.Jr. 1:276-278.
	7.	Srinivasan, G., M.J. Raff, W.C. Templeton, S.J. Givens, R.C. Graves, and J.C. Mel. 1981. <i>Branhamella catarrhalis</i> pneumonia. Report of two cases and review of the literature. Am.Rev. Respir. Dis. 123:553-555.
	8.	West, M., S.L. Berk, and J.K. Smith. 1982. <i>Branhamella catarrhalis</i> pneumonia. South.Med. J. 75:1021-1023.
	9.	Christensen, J.J., and B. Bruun. 1985. Bacteremia caused by a beta-lactamase producing strain of <i>Branhamella catarrhalis</i> . Acta.Pathol. Microbiol. Immunol. Scand. Sect.B 93:273-275.
	10.	Craig, D.B., and P.A. Wehrle. 1983. <i>Branhamella catarrhalis</i> septic arthritis. J. Rheumatol. 10:985-986.
	11.	Guthrie, R., K. Bakenhaster, R.Nelson, and R. Woskobnick. 1988. <i>Branhamella catarrhalis</i> sepsis: a case report and review of the literature. J.Infect.Dis. 158:907-908.
	12.	Hiroshi, Saito, E.J. Anaissie, N.Khardori, and G.P. Bodey. 1988. <i>Branhamella catarrhalis</i> septicemia in patients Cancer 61:2315-2317
	13.	O'Neill, J.H., and P.W. Mathieson. 1987. Meningitis due to <i>Branhamella catarrhalis</i> . Aust. N.Z. J. Med. 17:241-242.
	14.	Murphy, T.F. 1989. The surface of <i>Branhamella catarrhalis</i> : a systematic approach to the surface antigens of an emerging pathogen. Pediatr. Infect. Dis. J. 8:S75-S77.
	15.	Van Hare, G.F., P.A. Shurin, C.D. Marchant, N.A. Cartelli, C.E.Johnson, D. Fulton, S. Carlin, and C.H. Kim. Acute otitis media caused by <i>Branhamella catarrhalis</i> : biology and therapy. Rev. Infect. Dis. 9:16-27.
	16.	Jorgensen, J.H., Doern, G.V., Maher, L.A., Howell, A.W., and Redding, J.S., 1990 Antimicrobial resistance among respiratory isolates of <i>Haemophilus influenza</i> , <i>Moraxella catarrhalis</i> , and <i>Streptococcus pneumoniae</i> in the United States. Antimicrob. Agents Chemother. 34: 2075-2080.
	17.	Schryvers, A.B. and Morris, L.J. 1988 Identification and Characterization of the transferrin receptor from <i>Neisseria meningitidis</i> . Mol. Microbiol. 2:281-288.
	18.	Lee, B.C., Schryvers, A.B. Specificity of the lactoferrin and transferrin receptors in <i>Neisseria gonorrhoeae</i> . Mol. Microbiol. 1988; 2:827-9.
	19.	Schryvers, A.B. Characterization of the human transferrin and lactoferrin receptors in <i>Haemophilus influenzae</i> . Mol. Microbiol. 1988; 2: 467-72.
Duplicate of #28	20.	Schryvers, A.B. and Lee, B.C. (1988) Comparative analysis of the transferrin and lactoferrin binding proteins in the family <i>Neisseriaceae</i> . Can. J. Microbiol. 35, 409-415.
	21.	Yu, R. and Schryvers, A.B., 1993. The interaction between human transferrin and transferrin binding protein 2 from <i>Moraxella (Branhamella) catarrhalis</i> differs from that of other human pathogens. Microbiol. Pathogenesis, 15:433-445.
	22.	O'Hagan, 1992. Clin. Pharmacokin. 22:1
	23.	Ulmer et al., 1993. Curr. Opinion Invest. Drugs 2: 983-989.
	24.	Lockhoff, O., 1991. Glycolipids as immunomodulators: Synthesis and properties. Chem. Int. Ed. Engl. 30: 1611-1620.
	25.	Nixon-George, 1990. J. Immunol. 14: 4798-4802.
	26.	Wallace, R.J. Jr., Nash, D.R., and Steingrube, V.A. 1990. Antibiotic susceptibilities and drug resistance in <i>Moraxella (Branhamella) catarrhalis</i> . Am. J. Med. 88 (5A): 465-50S.
	27.	F.M. Ausubel et al., Short protocols in Molecular Biology, Greene Publishing Associates and John Wiley and Sons.
	28.	Schryvers, A.B., Lee, B.C. 1989. Comparative analysis of the transferrin and lactoferrin binding proteins in the family <i>Neisseriaceae</i> . Can. J. Microbiol. 35: 409-415.
	29.	Legrain, M., V. Mazarin, S.W. Irwin, B. Bouchon, M-J. Quentin-Millet, E. Jacobs, and A.B. Schryvers. 1993. Cloning and characterization of <i>Neisseria meningitidis</i> genes encoding the transferrin-binding proteins Tbp1 and Tbp2. Gene 130: 73-80.
	30.	Ogunnariwo, J.W., Woo, T.K.W., Lo, R.Y.C., Gonzalez, G.C., and Schryvers, A.B. Characterization of the <i>Pasteurella haemolytica</i> transferrin receptor genes and the recombinant receptor proteins. Microb. Pathog. 23:273-284 (1997).
	31.	Yang, Y.P., Myers, L.E., McGuinness, U., Chong, P., Kwok, Y., Klein, M.H. and Harkness R.E. The major outer membrane protein, C.D, extracted from <i>Moraxella (Branhamella) catarrhalis</i> is a potential vaccine antigen that induces bactericidal antibodies. FEMS Immun. Med. Microbiol. 17:187-199 (1997).



	32.	Needleman, S.B., and Wunsch, C.D. 1970, J. Mol Biol. 48:443-453.
	33.	Sellers, P.J. 1974 On the theory and computation of evolutionary distances, J. Appl. Math (Siam) 26:787-793.
	34.	Waterman, M.S., Smith, T.F., and Beyer, W.A. 1976. Advan. Math. 20:367-387.
	35.	Gerlach et al (1992) Infection and Immunity 60: 3253-3261
	36.	Anderson et al (1994) J. Bacteriology 176: 3162-3170
	37.	Gray-Owen et al (1995) Infection and Immunity 63: 1201-1210
	38.	Bowie et al (1990) Science 247: 1306-1310
	39.	Regenmortel (1986) TIBS 11: 36-39
	40.	George et al (1988) Macromolecular Sequencing and Synthesis (Ed. By D. H. Schlesinger) Alan R. Liss, Inc., New York, pp 127-129
	41.	Smith, T.F., and Waterman, M.S. 1981 Identification of common molecular subsequences. J. Mol. Biol. 147:195-197.
	42.	Jimenez-Montano, M. and Zamora-Cortina, L. 1981 Evolutionary model for the generation of amino acid sequences and its application to the study of mammal alpha-hemoglobin chains. Proc. VII Int. Biophysics Congress, Mexico City.
	43.	Sobel, E. and Martinez, H.M. 1985 A Multiple Sequence Alignment Program. Nucleic Acid Res. 14:363-374.
	44.	Myers, L.E. et al, 1998, The transferrin binding protein B of Moraxella Catarrhalis elicits bactericidal antibodies and is a potential vaccine antigen. Infect. And Immunity, Vol. 66, No. 9, pages 4183-4192
EXAMINER:		DATE CONSIDERED:

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication with applicant.